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C:\Program Files\Stnexp\Queries\10659537.str
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chain bonds:
   2-20 5-7 18-20
ring bonds :
    1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 10-23 11-12 12-13 13-14 13-16 14-15
   14-19 15-24 16-17 17-18 18-19
exact/norm bonds :
   1-2 1-6 2-3 2-20 3-4 4-5 5-6 5-7 10-23 13-16 14-19 15-24 16-17 17-18 18-19
exact bonds :
   18-20
normalized bonds:
   10-11 10-15 11-12 12-13 13-14 14-15
G1: [*1], [*2], [*3]
Match level:
   1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 10:Atom 11:Atom 12:Atom
   13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:CLASS 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom
Generic attributes :
   7:
   Saturation
                         : Unsaturated
```

1 2 3 4 5 6 10 11 12 13 14 15 16 17 18 19 23 24 25 26 27

chain nodes : 7 20 ring nodes :

=>

Uploading C:\Program Files\Stnexp\Queries\10659537.str

```
chain nodes :
7 20
ring nodes :
1 2 3 4 5 6 10 11 12 13 14 15 16 17 18
                                                19
                                                    23
chain bonds :
2-20 5-7 18-20
ring bonds :
1-2 1-6 2-3, 3-4 4-5 5-6 10-11 10-15 10-23 11-12 12-13 13-14 13-16
14-15 14-19 15-24 16-17 17-18 18-19
exact/norm bonds :
1-2 1-6 2-3 2-20 3-4 4-5 5-6 5-7 10-23 13-16 14-19 15-24 16-17 17-18
18-19
exact bonds :
18-20
normalized bonds :
10-11 10-15 11-12 12-13 13-14 14-15
```

G1: [\*1], [\*2], [\*3]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:CLASS 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom Generic attributes :

7:

Saturation : Unsaturated

L1 STRUCTURE UPLOADED

=> s l1 SAMPLE SEARCH INITIATED 16:32:24 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 7 TO ITERATE

100.0% PROCESSED

7 ITERATIONS

5 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 7 TO 298
PROJECTED ANSWERS: 5 TO 234

L2 5 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 16:32:31 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 89 TO ITERATE

100.0% PROCESSED 89 ITERATIONS 54 ANSWERS

SEARCH TIME: 00.00.01

L3 54 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL

FULL ESTIMATED COST ENTRY SESSION 161.33 161.75

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FILE COVERS 1907 - 7 Feb 2005 VOL 142 ISS 7 FILE LAST UPDATED: 6 Feb 2005 (20050206/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L4 4 L3

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T.4
     ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
AN
     2004:589245 CAPLUS
DN
     141:123658
ΤI
     Preparation of antidepressant arylpiperazine derivatives of
     heterocycle-fused benzodioxans
IN
     Evrard, Deborah Ann; Zhou, Dahui; Stack, Gary Paul; Venkatesan, Aranapakam
     Madumbai; Failli, Amedeo A.; Croce, Susan Christman
PA
     USA
SO
     U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of U.S. Provisional Ser. No.
     410,082.
     CODEN: USXXCO
DT
     Patent
LA
     English
FAN.CNT 2
     PATENT NO.
                                                  APPLICATION NO.
                            KIND
                                    DATE
                                                                             DATE
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                                                  -----
PΙ
     US 2004142926
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                                                                             20030910
     WO 2004024731
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                                                                             20030911
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              LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM,
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PRAI US 2002-410082P
                             Р
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     US 2003-659537
                             Α
                                    20030910
os
     MARPAT 141:123658
GI
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The title compds. [I; R1 = H, halo, CN, carboxamido, etc.; XY = N:CR2CR3:N, N:CR2CR4:CH, N:CR2N:CH, N:CR2O, NHCR5:CH; R2, R3 = H, halo, AB NH2, mono- or dialkylamino, alkyl; R4 = H, alkyl; R5 = H, halo, CF3, pentafluoroethyl, alkyl; Ar = (un)substituted Ph, naphthyl, indolyl, indazolyl, thienyl, etc.; n = 1-2], useful for the treatment of depression (including but not limited to major depressive disorder, childhood depression and dysthymia), anxiety, panic disorder, post-traumatic stress disorder, premenstrual dysphoric disorder (also known as premenstrual syndrome), attention deficit disorder (with and without hyperactivity), obsessive compulsive disorder, social anxiety disorder, generalized anxiety disorder, obesity, eating disorders such as anorexia nervosa and bulimia nervosa, vasomotor flushing, cocaine and alc. addiction, sexual dysfunction and related illnesses, were prepared Thus, reacting [(2S)-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinolin-2-yl]methyl 4-bromobenzenesulfonate with 3-chlorophenylpiperazine. HCl in the presence of EtN(iso-Pr)2 in DMSO afforded 68% (2S)-2-{[4-(3-chlorophenyl)piperazin-

I

```
exemplified compds. I were tested for 5-HT transporter affinity, 5-HT1A
     receptor affinity, and antagonistic activity at 5-HT1A receptors and biol.
     data were given. The pharmaceutical composition comprising the compound I is
     claimed.
ΙT
     676130-75-9P 676130-76-0P 676130-77-1P
     676130-78-2P 676130-79-3P 676130-80-6P
     676130-81-7P 676130-82-8P 676130-83-9P
     676130-84-0P 676130-85-1P 676130-86-2P
     676130-87-3P 676130-88-4P 676130-89-5P
     676130-90-8P 676130-91-9P 676130-92-0P
     676130-93-1P 676130-94-2P 676130-95-3P
     676130-96-4P 676130-97-5P 676130-98-6P
     676130-99-7P 676131-00-3P 676131-01-4P
     676131-02-5P 676131-03-6P 676131-04-7P
     676131-05-8P 676131-06-9P 676131-07-0P
     676131-08-1P 676131-09-2P 676131-10-5P
     676131-11-6P 676131-12-7P 676131-13-8P
     676131-14-9P 676131-15-0P 676131-32-1P
     676131-33-2P 676131-34-3P 676131-35-4P
     676131-36-5P 676131-37-6P 676131-38-7P
     676131-39-8P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of antidepressant arylpiperazine derivs. of heterocycle-fused
        benzodioxans as serotonin reuptake inhibitors and 5-HT1A receptor
        antagonists)
     676130-75-9 CAPLUS
RN
CN
     1,4-Dioxino[2,3-f]quinoline, 2-[[4-(3-chlorophenyl)-1-piperazinyl]methyl]-
     2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)
```

1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline. The

Absolute stereochemistry.

```
RN 676130-76-0 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(4-chlorophenyl)-1-piperazinyl]methyl]-
2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)
```

RN 676130-77-1 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(3,4-dichlorophenyl)-1-piperazinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676130-78-2 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(3,4-dichlorophenyl)-1-piperazinyl]methyl]-2,3-dihydro-8-methyl-, (2S)-, (2E)-2-butenedioate (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 676130-77-1 CMF C23 H23 Cl2 N3 O2

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 676130-79-3 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-2-[[4-(2-methoxyphenyl)-1-piperazinyl]methyl]-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676130-80-6 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-2-[[4-(3-methoxyphenyl)-1-piperazinyl]methyl]-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676130-81-7 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-2-[[4-(4-methoxyphenyl)-1-piperazinyl]methyl]-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676130-82-8 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(2,3-dihydro-1,4-benzodioxin-5-yl)-1-piperazinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

RN 676130-83-9 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(2,3-dihydro-1,4-benzodioxin-5-yl)-1-piperazinyl]methyl]-2,3-dihydro-8-methyl-, (2S)-, (2E)-2-butenedioate (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 676130-82-8 CMF C25 H27 N3 O4

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4 Double bond geometry as shown.

RN 676130-84-0 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[4-[3-(trifluoromethyl)phenyl]-1-piperazinyl]methyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676130-85-1 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(3-fluorophenyl)-1-piperazinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676130-86-2 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(2,3-dimethylphenyl)-1-

piperazinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)
Absolute stereochemistry.

RN 676130-87-3 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(3,4-dimethylphenyl)-1-piperazinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676130-88-4 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[4-(2-quinolinyl)-1-piperazinyl]methyl]-, (2S)- (9CI) (CA INDEX NAME)

RN 676130-89-5 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[4-(2-quinolinyl)-1-piperazinyl]methyl]-, tetrahydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## •4 HCl

RN 676130-90-8 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[4-(6-nitro-2-quinolinyl)-1-piperazinyl]methyl]-, (2S)- (9CI) (CA INDEX NAME)

RN 676130-91-9 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[4-(6-nitro-2-quinolinyl)-1-piperazinyl]methyl]-, hydrochloride (4:11), (2S)- (9CI) (CAINDEX NAME)

Absolute stereochemistry.

# ●11/4 HCl

RN 676130-92-0 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(6-chloro-2-quinoliny1)-1-piperaziny1]methy1]-2,3-dihydro-8-methy1-, (2S)- (9CI) (CA INDEX NAME)

RN 676130-93-1 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(6-chloro-2-quinolinyl)-1-piperazinyl]methyl]-2,3-dihydro-8-methyl-, tetrahydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

# ●4 HCl

RN 676130-94-2 CAPLUS

CN 6-Quinolinecarbonitrile, 2-[4-[[(2S)-2,3-dihydro-8-methyl-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

RN 676130-95-3 CAPLUS

CN 6-Quinolinecarbonitrile, 2-[4-[[(2S)-2,3-dihydro-8-methyl-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1-piperazinyl]-, trihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

# ●3 HCl

RN 676130-96-4 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-2-[[4-(7-methoxy-3-benzofuranyl)-1-piperazinyl]methyl]-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

RN 676130-97-5 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(5-fluoro-3-benzofuranyl)-1-piperazinyl]methyl]-2,3-dihydro-8-methyl-, hydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

# ●x HCl

RN 676130-98-6 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(3-benzofuranyl)-1-piperazinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

RN 676130-99-7 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[(2S)-2-methyl-4-(2-quinolinyl)-1-piperazinyl]methyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 676131-00-3 CAPLUS

CN 6-Quinolinecarbonitrile, 2-[(3R)-4-[[(2S)-2,3-dihydro-8-methyl-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-3-methyl-1-piperazinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 676131-01-4 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[(2R)-2-methyl-4-(2-quinolinyl)-1-piperazinyl]methyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 676131-02-5 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[4-(2-naphthalenyl)-1-piperazinyl]methyl]-, (2S)- (9CI) (CA INDEX NAME)

RN 676131-03-6 CAPLUS

CN 6-Quinolinecarboxamide, 2-[4-[[(2S)-2,3-dihydro-8-methyl-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676131-04-7 CAPLUS

CN 6-Quinolinecarboxamide, 2-[4-[[(2S)-2,3-dihydro-8-methyl-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1-piperazinyl]-, dihydrochloride (9CI) (CA INDEX NAME)

RN 676131-05-8 CAPLUS

CN 6-Quinolinecarbonitrile, 2-[4-[[(2S)-2,3-dihydro-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676131-06-9 CAPLUS

CN 6-Quinolinecarbonitrile, 2-[4-[[(2S)-2,3-dihydro-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1-piperazinyl]-, trihydrochloride (9CI) (CA INDEX NAME)

#### ●3 HCl

RN 676131-07-0 CAPLUS

CN 6-Quinolinecarbonitrile, 2-[4-[[(2S)-8-ethyl-2,3-dihydro-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676131-08-1 CAPLUS

CN 6-Quinolinecarbonitrile, 2-[4-[[(2S)-8-ethyl-2,3-dihydro-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1-piperazinyl]-, trihydrochloride (9CI) (CA INDEX NAME)

●3 HCl

RN 676131-09-2 CAPLUS

CN 6-Quinolinecarbonitrile, 2-[4-[[(8S)-7,8-dihydro-2-methyl[1,4]dioxino[2,3-g]benzoxazol-8-yl]methyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676131-10-5 CAPLUS

CN 6-Quinolinecarbonitrile, 2-[4-[[(8S)-7,8-dihydro-2-methyl[1,4]dioxino[2,3-g]benzoxazol-8-yl]methyl]-1-piperazinyl]-, dihydrochloride (9CI) (CA INDEX NAME)

•2 HCl

RN 676131-11-6 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(6-bromo-2-quinoliny1)-1-piperaziny1]methy1]-2,3-dihydro-8-methy1-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676131-12-7 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-2-[[4-(6-methoxy-2-quinolinyl)-1-piperazinyl]methyl]-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

RN 676131-13-8 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[hexahydro-4-(6-methoxy-2-quinoliny1)-1H-1,4-diazepin-1-yl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676131-14-9 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[hexahydro-4-(6-methoxy-2-quinolinyl)-1H-1,4-diazepin-1-yl]methyl]-2,3-dihydro-8-methyl-, trihydrochloride, (2S)-(9CI) (CA INDEX NAME)

#### ●3 HCl

RN 676131-15-0 CAPLUS

CN 6-Quinolinecarbonitrile, 2-[4-[[(2S)-2,3-dihydro-8-methyl-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]hexahydro-1H-1,4-diazepin-1-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676131-32-1 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(5-fluoro-3-benzofuranyl)-1-piperazinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

RN 676131-33-2 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[4-[6-(trifluoromethoxy)-2-quinolinyl]-1-piperazinyl]methyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676131-34-3 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(6-fluoro-2-quinoliny1)-1-piperaziny1]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

RN 676131-35-4 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[hexahydro-4-[6-(trifluoromethoxy)-2-quinolinyl]-1H-1,4-diazepin-1-yl]methyl]-2,3-dihydro-8-methyl-, (2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676131-36-5 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(6-fluoro-2-quinolinyl)hexahydro-1H-1,4-diazepin-1-yl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

RN 676131-37-6 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(6-bromo-2-quinolinyl)hexahydro-1H-1,4-diazepin-1-yl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676131-38-7 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[hexahydro-4-(2-quinolinyl)-1H-1,4-diazepin-1-yl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

RN 676131-39-8 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[hexahydro-4-(4-methyl-2-quinolinyl)-1H-1,4-diazepin-1-yl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

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L4
      ANSWER 2 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
AN
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DN.
      140:287410
      Preparation of antidepressant arylpiperazine derivatives of
ΤI
      heterocycle-fused benzodioxans
IN
      Evrard, Deborah A.; Zhou, Dahui; Stack, Gary Paul; Venkatesan, Arenapakam
      Madumbai; Failli, Amedeo A.; Croce, Susan Christman
PA
      Wyeth, John, and Brother Ltd., USA
SO
      PCT Int. Appl., 84 pp.
      CODEN: PIXXD2
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                                                          WO 2003-US28453
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                                  Α
                                          20030910
      MARPAT 140:287410
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$$X$$
 $Y$ 
 $O$ 
 $N$ 
 $Ar$ 
 $N$ 
 $Ar$ 

The title compds. [R1 = H, halo, CN, carboxamido, etc.; XY = N:CR2CR3:N, AB N:CR2CR4:CH, N:CR2N:CH, N:CR2O, NHCR5:CH; R2, R3 = H, halo, NH2, mono-or dialkylamino, alkyl; R4 = H, alkyl; R5 = H, halo, CF3, pentafluoroethyl, alkyl; Ar = (un)substituted Ph, naphthyl, indoleyl, indazolyl, thienyl, etc.; n = 1-2], useful for the treatment of depression (including but not limited to major depressive disorder, childhood depression and dysthymia), anxiety, panic disorder, post-traumatic stress disorder, premenstrual dysphoric disorder (also known as premenstrual syndrome), attention deficit disorder (with and without hyperactivity), obsessive compulsive disorder, social anxiety disorder, generalized anxiety disorder, obesity, eating disorders such as anorexia nervosa and bulimia nervosa, vasomotor flushing, cocaine and alc. addiction, sexual dysfunction and related illnesses, were prepared Thus, reacting [(2S)-8-methyl-2,3dihydro[1,4]dioxino[2,3-f]quinolin-2-yl]methyl 4-bromobenzenesulfonate with 3-chlorophenylpiperazine. HCl in the presence of EtN(iso-Pr)2 in DMSO afforded 68% (2S)-2-{[4-(3-chlorophenyl)piperazin-1-yl]methyl}-8-methyl-2,3-dihydro[1,4]dioxino[2,3-f]quinoline. The exemplified compds. I were

Ι

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tested for 5-HT transporter affinity, 5-HT1A receptor affinity, and
     antagonistic activity at 5-HT1A receptors and biol. data were given.
                                                                            The
    pharmaceutical composition comprising the compound I is claimed.
ΙT
     676130-75-9P 676130-76-0P 676130-77-1P
     676130-78-2P 676130-79-3P 676130-80-6P
     676130-81-7P 676130-82-8P 676130-83-9P
     676130-84-0P 676130-85-1P 676130-86-2P
     676130-87-3P 676130-88-4P 676130-89-5P
     676130-90-8P 676130-91-9P 676130-92-0P
     676130-93-1P 676130-94-2P 676130-95-3P
     676130-96-4P 676130-97-5P 676130-98-6P
     676130-99-7P 676131-00-3P 676131-01-4P
     676131-02-5P 676131-03-6P 676131-04-7P
     676131-05-8P 676131-06-9P 676131-07-0P
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     676131-11-6P 676131-12-7P 676131-13-8P
     676131-14-9P 676131-15-0P 676131-32-1P
     676131-33-2P 676131-34-3P 676131-35-4P
     676131-36-5P 676131-37-6P 676131-38-7P
     676131-39-8P
    RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of antidepressant arylpiperazine derivs. of heterocycle-fused
        benzodioxans as serotonin reuptake inhibitors and 5-HT1A receptor
        antagonists)
     676130-75-9 CAPLUS
RN
     1,4-Dioxino[2,3-f]quinoline, 2-[[4-(3-chlorophenyl)-1-piperazinyl]methyl]-
CN
     2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)
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Absolute stereochemistry.

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RN 676130-76-0 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(4-chlorophenyl)-1-piperazinyl]methyl]-
2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)
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RN 676130-77-1 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(3,4-dichlorophenyl)-1-piperazinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676130-78-2 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(3,4-dichlorophenyl)-1 piperazinyl]methyl]-2,3-dihydro-8-methyl-, (2S)-, (2E)-2-butenedioate
 (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 676130-77-1 CMF C23 H23 Cl2 N3 O2

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 676130-79-3 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-2-[[4-(2-methoxyphenyl)-1-piperazinyl]methyl]-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676130-80-6 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-2-[[4-(3-methoxyphenyl)-1-piperazinyl]methyl]-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676130-81-7 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-2-[[4-(4-methoxyphenyl)-1-piperazinyl]methyl]-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676130-82-8 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(2,3-dihydro-1,4-benzodioxin-5-yl)-1-piperazinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

RN 676130-83-9 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(2,3-dihydro-1,4-benzodioxin-5-yl)-1-piperazinyl]methyl]-2,3-dihydro-8-methyl-, (2S)-, (2E)-2-butenedioate (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 676130-82-8 CMF C25 H27 N3 O4

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4 Double bond geometry as shown.

RN 676130-84-0 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[4-[3-(trifluoromethyl)phenyl]-1-piperazinyl]methyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676130-85-1 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(3-fluorophenyl)-1-piperazinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676130-86-2 CAPLUS

CN 1,4-Dioxino[2,3-f] quinoline, 2-[[4-(2,3-dimethylphenyl)-1-

piperazinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)
Absolute stereochemistry.

RN 676130-87-3 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(3,4-dimethylphenyl)-1-piperazinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676130-88-4 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[4-(2-quinolinyl)-1-piperazinyl]methyl]-, (2S)- (9CI) (CA INDEX NAME)

RN 676130-89-5 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[4-(2-quinolinyl)-1-piperazinyl]methyl]-, tetrahydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## ●4 HCl

RN 676130-90-8 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[4-(6-nitro-2-quinolinyl)-1-piperazinyl]methyl]-, (2S)- (9CI) (CA INDEX NAME)

RN 676130-91-9 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[4-(6-nitro-2-quinolinyl)-1-piperazinyl]methyl]-, hydrochloride (4:11), (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## ●11/4 HCl

RN 676130-92-0 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(6-chloro-2-quinoliny1)-1-piperaziny1]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

RN 676130-93-1 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(6-chloro-2-quinolinyl)-1-piperazinyl]methyl]-2,3-dihydro-8-methyl-, tetrahydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## ●4 HCl

RN 676130-94-2 CAPLUS

CN 6-Quinolinecarbonitrile, 2-[4-[[(2S)-2,3-dihydro-8-methyl-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

RN 676130-95-3 CAPLUS

CN 6-Quinolinecarbonitrile, 2-[4-[[(2S)-2,3-dihydro-8-methyl-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1-piperazinyl]-, trihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## ●3 HCl

RN 676130-96-4 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-2-[[4-(7-methoxy-3-benzofuranyl)-1-piperazinyl]methyl]-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

RN 676130-97-5 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(5-fluoro-3-benzofuranyl)-1-piperazinyl]methyl]-2,3-dihydro-8-methyl-, hydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

•x HCl

RN 676130-98-6 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(3-benzofuranyl)-1-piperazinyl]methyl]2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

RN 676130-99-7 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[(2S)-2-methyl-4-(2-quinolinyl)-1-piperazinyl]methyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 676131-00-3 CAPLUS

CN 6-Quinolinecarbonitrile, 2-[(3R)-4-[[(2S)-2,3-dihydro-8-methyl-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-3-methyl-1-piperazinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 676131-01-4 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[(2R)-2-methyl-4-(2-quinolinyl)-1-piperazinyl]methyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 676131-02-5 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[4-(2-naphthalenyl)-1-piperazinyl]methyl]-, (2S)- (9CI) (CA INDEX NAME)

RN 676131-03-6 CAPLUS

CN 6-Quinolinecarboxamide, 2-[4-[[(2S)-2,3-dihydro-8-methyl-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676131-04-7 CAPLUS

CN 6-Quinolinecarboxamide, 2-[4-[[(2S)-2,3-dihydro-8-methyl-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1-piperazinyl]-, dihydrochloride (9CI) (CA INDEX NAME)

RN 676131-05-8 CAPLUS

CN 6-Quinolinecarbonitrile, 2-[4-[[(2S)-2,3-dihydro-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676131-06-9 CAPLUS

CN 6-Quinolinecarbonitrile, 2-[4-[[(2S)-2,3-dihydro-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1-piperazinyl]-, trihydrochloride (9CI) (CA INDEX NAME)

● 3 HCl

RN 676131-07-0 CAPLUS

CN 6-Quinolinecarbonitrile, 2-[4-[[(2S)-8-ethyl-2,3-dihydro-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676131-08-1 CAPLUS

CN 6-Quinolinecarbonitrile, 2-[4-[[(2S)-8-ethyl-2,3-dihydro-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]-1-piperazinyl]-, trihydrochloride (9CI) (CA INDEX NAME)

●3 HCl

RN 676131-09-2 CAPLUS

CN 6-Quinolinecarbonitrile, 2-[4-[[(8S)-7,8-dihydro-2-methyl[1,4]dioxino[2,3-g]benzoxazol-8-yl]methyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676131-10-5 CAPLUS

CN 6-Quinolinecarbonitrile, 2-[4-[[(8S)-7,8-dihydro-2-methyl[1,4]dioxino[2,3-g]benzoxazol-8-yl]methyl]-1-piperazinyl]-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

RN 676131-11-6 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(6-bromo-2-quinolinyl)-1-piperazinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676131-12-7 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-2-[[4-(6-methoxy-2-quinolinyl)-1-piperazinyl]methyl]-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

RN 676131-13-8 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[hexahydro-4-(6-methoxy-2-quinolinyl)-1H-1,4-diazepin-1-yl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676131-14-9 CAPLUS

CN 1,4-Dioxino.[2,3-f]quinoline, 2-[[hexahydro-4-(6-methoxy-2-quinolinyl)-1H-1,4-diazepin-1-yl]methyl]-2,3-dihydro-8-methyl-, trihydrochloride, (2S)-(9CI) (CA INDEX NAME)

#### ■3 HC1

RN 676131-15-0 CAPLUS
CN 6-Quinolinecarbonitrile, 2-[4-[[(2S)-2,3-dihydro-8-methyl-1,4-dioxino[2,3-f]quinolin-2-yl]methyl]hexahydro-1H-1,4-diazepin-1-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676131-32-1 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(5-fluoro-3-benzofuranyl)-1-piperazinyl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

RN 676131-33-2 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2,3-dihydro-8-methyl-2-[[4-[6-(trifluoromethoxy)-2-quinolinyl]-1-piperazinyl]methyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676131-34-3 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(6-fluoro-2-quinoliny1)-1-piperaziny1]methy1]-2,3-dihydro-8-methy1- (9CI) (CA INDEX NAME)

RN 676131-35-4 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[hexahydro-4-[6-(trifluoromethoxy)-2-quinolinyl]-1H-1,4-diazepin-1-yl]methyl]-2,3-dihydro-8-methyl-, (2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 676131-36-5 CAPLUS
CN 1,4-Dioxino[2,3-f]quinoline, 2-[[4-(6-fluoro-2-quinolinyl)hexahydro-1H-1,4-diazepin-1-yl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

RN676131-37-6 CAPLUS

CN1,4-Dioxino[2,3-f]quinoline, 2-[[4-(6-bromo-2-quinolinyl)hexahydro-1H-1,4diazepin-1-yl]methyl]-2,3-dihydro-8-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN.

676131-38-7 CAPLUS

1,4-Dioxino[2,3-f]quinoline, 2-[[hexahydro-4-(2-quinolinyl)-1H-1,4-CNdiazepin-1-yl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

RN 676131-39-8 CAPLUS

CN 1,4-Dioxino[2,3-f]quinoline, 2-[[hexahydro-4-(4-methyl-2-quinolinyl)-1H-1,4-diazepin-1-yl]methyl]-2,3-dihydro-8-methyl- (9CI) (CA INDEX NAME)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN AN 1999:100823 CAPLUS DN 130:168383 Preparation of 2-(azaheterocyclymethyl)-2,3,8,9-tetrahydro-7H-1,4-TI dioxino[2,3-e]indol-8-ones as antipsychotics. Stack, Gary Paul IN American Home Products Corporation, USA PΑ SO U.S., 13 pp. CODEN: USXXAM DT Patent LA English FAN.CNT 1 PATENT NO. KIND APPLICATION NO. DATE DATE ----------PΙ US 5869490 Α 19990209 US 1997-947565 19971009 PRAI US 1997-947565 19971009 MARPAT 130:168383 os GΙ

AB Title compds. [I; X = H2, O; R1 = H, OH, halo, CF3, OCF3, alkyl, alkoxy, aralkoxy, alkanoyloxy, amino, alkanamido, alkanesulfonamido; Z = (substituted) piperazinyl, (substituted) (benzo-fused) piperidinyl], were prepared Thus, (R)-(2-tosyloxymethyl)-6-fluoro-2,3,8,9-tetrahydro-7H-1,4-dioxino[2,3-e]indol-8-one and tetrahydroisoquinoline were heated 4 h in Me2SO to give (S)-2-(3,4-dihydro-1H-isoquinolin-2-ylmethyl)-6-fluoro-2,3,8,9-tetrahydro-7H-1,4-dioxino[2,3-e]indol-8-amine, isolated as the fumarate. This showed D2 receptor affinity with IC50 = 0.23 nM.

IT 206355-37-5P 206355-52-4P 220456-58-6P 220456-61-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of azaheterocyclymethyltetrahydrodioxinoindolones as antipsychotics)

RN 206355-37-5 CAPLUS

CN 8H-1,4-Dioxino[2,3-e]indol-8-one, 2,3,7,9-tetrahydro-2-[[4-(1H-indol-4-yl)-1-piperazinyl]methyl]-, (2S)- (9CI) (CA INDEX NAME)

RN 206355-52-4 CAPLUS

CN 8H-1,4-Dioxino[2,3-e]indol-8-one, 2,3,7,9-tetrahydro-2-[[4-(1H-indol-4-yl)-1-piperazinyl]methyl]-, (2S)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 206355-37-5 CMF C23 H24 N4 O3

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 220456-58-6 CAPLUS

CN 8H-1,4-Dioxino[2,3-e]indol-8-one, 2,3,7,9-tetrahydro-2-[[4-(1H-indol-4-yl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)

RN 220456-61-1 CAPLUS

CN 8H-1,4-Dioxino[2,3-e]indol-8-one, 2-[[4-(1,2-benzisothiazol-3-yl)-1-piperazinyl]methyl]-2,3,7,9-tetrahydro- (9CI) (CA INDEX NAME)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L4
     ANSWER 4 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
AN
     1998:251174 CAPLUS
DN
     128:308493
TI
     Preparation of azaheterocyclymethyl derivatives of 2,3,8,9-tetrahydro-7h-
     1,4-dioxino[2,3-e]indol-8-one for the treatment of brain dopamine
     dysregulation
IN
     Stack, Gary Paul
PA
     American Home Products Corporation, USA
SO
     PCT Int. Appl., 40 pp.
     CODEN: PIXXD2
DT
     Patent
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     English
FAN.CNT 1
     PATENT NO.
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                                              APPLICATION NO.
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                                             WO 1997-US18275
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     WO 9816530
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                                  20030514
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                                              JP 1998-518447
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     AT 240335
                           Ε
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                           Т
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                                                                      19971010
     ES 2196312
                           Т3
                                  20031216
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                                                                      19971010
PRAI US 1996-732807
                           Α
                                  19961015
     WO 1997-US18275
                           W
                                  19971010
os
     MARPAT 128:308493
GΙ
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# \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

The title compds. [I; X = H2, O; R1 = H, OH, halo, etc.; Z = II, III, IV (wherein R2 = H, C1-6 alkyl, C3-8 cycloalkyl, etc.; R3 = H and R4 = H, (un)substituted 1-benzimidazolyl-2-one, indolyl, etc.; R3R4 taken together with the carbon atom to which they are attached form V or VI; R5 = H and R6 = (un)substituted Ph, naphthyl, thienyl, etc.; R5R6 taken together with the carbon atoms to which they are attached complete a benzene ring optionally substituted with R1)] and their salts, useful for the treatment of brain dopamine dysregulation, especially schizophrenia or a schizoaffective disorder, were prepared Thus, reaction of (R)-2-(toluene-4-sulfonyloxymethyl)-2,3,8,9-tetrahydro-7H-1,4-dioxino[2,3-e]indol-8-one (preparation described) with tetrahydroisoquinoline in DMSO afforded 82% (S)-I [X = H2; R1 = H; Z = 3,4-dihydro-1H-isoquinolin-2-yl] which showed IC50 of 0.35 nM against the dopamine D2 receptor binding.

IT 206355-37-5P 206355-46-6P 206355-52-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

Absolute stereochemistry.

RN 206355-46-6 CAPLUS CN 8H-1,4-Dioxino[2,3-e]indol-8-one, 2-[[4-(1,2-benzisothiazol-3-yl)-1-piperazinyl]methyl]-2,3,7,9-tetrahydro-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 206355-52-4 CAPLUS CN 8H-1,4-Dioxino[2,3-e]indol-8-one, 2,3,7,9-tetrahydro-2-[[4-(1H-indol-4-yl)-1-piperazinyl]methyl]-, (2S)-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM I

CRN 206355-37-5 CMF C23 H24 N4 O3

Absolute stereochemistry.

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L1

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STRUCTURE UPLOADED

L2 5 S L1

L3 54 S L1 SSS FULL

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L4 4 S L3

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L5 0 L3

=> log h

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

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